WAR DEPARTMENT TECHNICAL MANUAL

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**FITTING** 

OF

SHOES AND SOCKS

WAR DEPARTMENT • FEBRUARY 1946

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### WAR DEPARTMENT TECHNICAL MANUAL TM 10-228

### **FITTING**

### OF

# SHOES AND SOCKS



WAR DEPARTMENT • FEBRUARY 1946

United States Government Printing Office
Washington: 1946



### WAR DEPARTMENT Washington 25, D. C., 15 February 1946

TM 10-228, Fitting of Shoes and Socks, is published for the information and guidance of all concerned.

[AG 300.7 (16 Oct 45)]

BY ORDER OF THE SECRETARY OF WAR:

OFFICIAL:

DWIGHT D. EISENHOWER

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Refer to FM 21-6 for explanation of distribution formula.



#### TECHNICAL MANUAL

TO 13-1-47

### FITTING OF SHOES AND SOCKS

Changes No. 1

DEPARTMENT OF THE ARMY WASHINGTON 25, D. C., 19 May 1952

TM 10-228, 15 February 1946, is changed as follows:

# 22.1 Boots, Combat, Rubber, Insulated (Added)

a. Boots, combat, rubber, insulated (fig. 16.1) (Standard item) Stock Nos. 72-B-133-227 through 72-B-133-595, are available in full lengths 5 through 14, inclusive. The wearer shall try on the same length as his normal size for leather boots or if he wears a half size (i. e., 7½), try on the next shorter length (7). The insulated boot is supplied in five widths, XN, N, R, W, XW. The wearer should take the same width as his leather boot, or, if not supplied in that width, take the next narrower width for try-on. For guidance in selecting the size and width to try on, consult the following chart:



AGO 3864B-May 950996°-52

	EEEE	ΧW		ıs	REER	XM	9	BEBE	ΧM	7	EEEE	XW	<b>&amp;</b>	EEEE	ΧW	6	EEEE	XW	10	EEEE	
	233	×Χ		ro	EE	M	9	EE	×	7	田田	W	80	EE	M	6	EE	M	10	EE W	
	23	A	-	ro	EE	<b>→</b>	9	EE	M	7	EE	<b>≫</b>	8	EE	₩	6	ज <b>ल</b>	<b>X</b>	10	EE	
	<u>ы</u>	<b>A</b>	insulated	ro	Ω .	~	9	А	ద	7	А	絽	8	А	~	6	А	<b>E</b>	10	D K	
in leather boot	А	<b>E</b>	Size and width worn in boot, combat, rubber, insulated	ಬ	А	~	9	A	<b>24</b>	7	А	꿈	∞	A	더	6	А	<b>x</b>	10	O K	
Normal width worn in leather boot	D	<b>*</b>	worn in boot,	ಬ	Ø	Z	9	В	Z	7	B	z	∞	В	Z	6	Д	Z	10	M Z	
Nor	В	z	Size and width	7.0	В	Z	9	В	Z	7	В	Z	×	В	Z	6	В	z	10	MZ	-\-
-	<b>4</b>	z		<u></u>	AA	XX	9	AA	NX	7	AA	NX	8	AA	NX	6	AA	XN	10	AA XN	
	AA	NX		ro.	AA	NX	9	AA	XN	1	AA	NX	∞	AA	NX	6	A.A	NX	10	AA XN	
	AVA	NX		ಬ	AA	NX	9	AA	NX	1	AA	NX	∞	AA	NX	6	AA	NX	10	AA XN	
	Normal size worn in	leather boot		5 5/2			6 61/2			7 7/5			8 81/2			9 81/2			10 10%		

2 AGO 3864B



11 EEEE XW	12 EEEE XW	13 EEEE XW	14 EEEE XW
EE W	12 EE W	13 EE W	14 EE W
EE W	12 EE W	13 EE W	14 EE
R D 11	12 D	13 D	14 D
11 D	12 D R	13 D R	14 D
11 B N	12 B N	13 B N	14 B N
N B II	12 B N	13 B N	14 B N
AA XN	12 AA XN	13 AA XN	14 AA XN
AA XN	12 AA XN	13 AA XN	, 14 AA XN
AA XN	12 AA XN	13 AA XN	14 AA XN
1132	121/2	13½	141/2
11	12	13	14

AGO 3864B



b. The approved sock combination to be worn with each pair of boots, combat, rubber, insulated, is one pair of socks, wool, cushion-sole.



Figure 16.1 Boots, combat, rubber, insulated, with approved sock combination (one pair of socks, wool, cushion-sole).

[AG 300.7 (9 Apr 52)]

BY ORDER OF THE SECRETARY OF THE ARMY:

#### OFFICIAL:

WM. E. BERGIN Major General, USA The Adjutant General

# J. LAWTON COLLINS Chief of Staff, United States Army

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<sup>™</sup> **™558646** 

#### SECTION I

#### IMPORTANCE OF PROPER SHOE-FITTING

1. Purpose and Scope of Manual

- a. This manual establishes uniform procedures for the measurement of foot sizes and for the fitting of shoes and socks. It applies to all shoes, boots, socks, and stockings of quartermaster issue.
- b. Command functions on the fitting of Army footwear are covered by AR 850-125. Information on the care and use of footwear is also contained in FM 21-15 and TM 10-275.

#### 2. Feet and Foot Troubles

- a. The human foot is so constructed that each of its component parts has a definite and important function to perform. When any one of these functions is seriously interfered with by the wearing of misfitted footwear, discomfort and foot injury are likely to result. Most of the common types of foot ailments may be traced directly or indirectly to misfitted shoes.
- b. No two individuals have feet of the same shape, structure, and measurement. Some feet are long and narrow, others are short and wide. There are strong, bony feet with rigid arches, and soft, fleshy feet with weak arches. Some individuals have short toes and long arches, while others have long toes and short arches. Some feet have narrow heels and others have wide heels. Most individuals can be fitted comfortably with standard U. S. Army footwear. A few individuals require special measurement U. S. Army footwear.
- c. Both feet of an individual are seldom exactly the same in length and width. Some individuals have a longer left than right foot, while others have a longer right than left. There is usually a difference in the elongation and spread of an individual's feet while standing and sitting. For these reasons, both feet should be measured and both shoes should be tried on and checked for proper fit while the individual is in a standing position with his weight evenly distributed on both feet.
- d. Improperly fitted footwear may cause a great many ailments, not all of which are confined to the foot. In fact, most of the ill effects resulting from the continual wearing of misfitted footwear react upon the general well being of the individual, often to such an extent as to impair health, morale and efficiency. Properly



fitted footwear, therefore, is not only best for the individual, it is also essential to the welfare of the Army.

e. Many foot injuries resulting from misfitted footwear are slow to appear and for this reason some individuals can wear misfitted footwear for some time without any apparent ill effects. The continued wearing of misfitted footwear may eventually result in broken arches, chronic bunions, painful callouses, ingrown nails, corns, blisters, distorted toes, and aching feet. It is of utmost importance that the individual soldier wear footwear that fits properly.

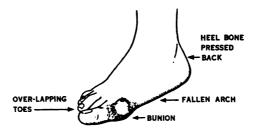


Figure 1. Common foot troubles.

#### 3. Short Shoe

In a short shoe, the foot does not expand naturally. A backward pressure forces a spreading of the toe joints, and often results in an irritation over the great and little toes, ingrown nails, and a tendency to bunion formation. Back-pressure on the forepart of the foot is transmitted to the arch, the bones of which may be jammed out of their normal position and eventually weakened so as to cause the arch to fall. Even normal, healthy feet may eventually become injured by short shoes.

### 4. Tight Shoe

In a tight shoe, the toes are pressed together so that they often overlap and restrict the normal flow of blood. In many cases, the bottom of the foot extends over the edge of the innersole which gradually presses a groove into the flesh. This pressure causes the flesh to become sore, then calloused and very painful. Corns may form between and over the toes and the feet may become weakened and distorted. Feet may be severely and permanently injured by tight shoes.

#### 5. Oversize Shoe

In an oversize shoe, the foot is not provided with proper support and consequently the foot cannot function normally. The weight-bearing portions of the foot are out of position and the expansion of the arch is abnormal. The foot is inclined to ride forward and sideways with a resulting chafing at the heel and toes

and at the bottom and outside of the foot. The oversize shoe is clumsy for walking and running and causes discomfort and fatigue under combat conditions or on a long march.

6. Correctly Fitted Shoe

The correctly fitted shoe holds the foot securely but not too firmly. It allows sufficient room in all of its dimensions for each component of the foot to function normally and with complete freedom from discomfort. It does not interfere with the proper position and functional spread of the weight-bearing portion of the foot, since there is no congestion at any point, and no strain or pressure which will cause distress or foot injury. In a correctly fitted shoe, there is no slipping at the heel and no backward pressure which prevents the normal gripping of the toes or tends to weaken the bones of the arch. For a foot to function as it should, the shoes worn must comply with the basic principles of proper shoe-fitting. To violate materially any of these essentials is to invite foot trouble.

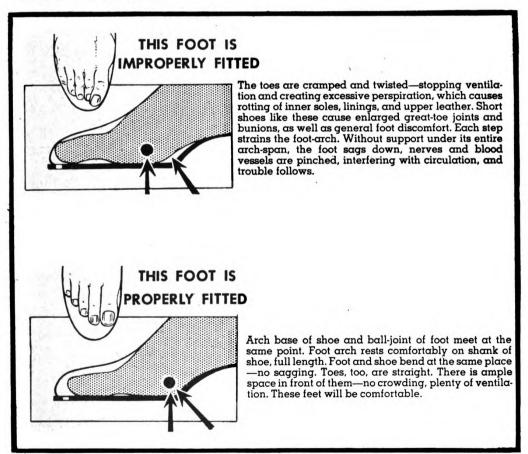


Figure 2. Proper and improper fitting.

# SECTION II SHOE-FITTING METHODS

7. Determination of Correctly Fitted Shoe Size

Many individuals are indifferent to their own best interests in the selection of a proper footwear size. The average person does not know the requirements of a properly fitted shoe, and even if he knows his proper civilian shoe size, he may not require the same size Army shoe, since the civilian shoe and the Army shoe do not usually measure alike. Because of the nature of Army duty and the heavier Army socks, a roomier Army shoe is usually required. For these reasons, the size of Army footwear required should not be decided by the individual. To assure the issue of properly fitted U.S. Army footwear, each individual should be foot-measured and fitted by a properly trained U.S. Army shoefitter in accordance with the provisions of this manual. Medical officers will not prescribe a definite size of shoe to be issued in exchange for one found by them to be the improper size for an individual. They will state only that the size of shoe worn does not fit properly and will request the quartermaster to determine the proper shoe size.

8. Properly Trained Shoe-fitter

The properly trained U. S. Army shoe-fitter will clearly understand the approved U. S. Army methods of foot-measuring and fitting of military footwear outlined in this manual. He will know how to operate properly the standard U. S. Army foot-measuring outfits, both men's and women's, and how to determine if a foot-wear item is correctly fitted in accordance with the standard U. S. Army fitting tests. Best results will be obtained if the foot-wear fitter has had at least 2 years of practical shoe-fitting experience in civilian life and if only properly trained shoe-fitting personnel are employed.

9. U. S. Army Shoe-fitting Checks

a. GENERAL. (1) In order to insure that the individual is issued correctly fitted military footwear, both boots (and shoes) will be tried on and checked for fit in accordance with approved U. S. Army shoe-fitting methods, while the individual is standing with his weight evenly distributed on both feet. The individual will wear the sock combination which is approved for wear with each



boot or shoe, the heels will be well back into the shoes, and the shoes will be laced through not less than the five lower eyelets unless a kickboard ((3) below) is used to assure proper position of the foot in the shoes.

- (2) Whenever it is known, from movement orders or otherwise, that an individual who has been issued boots or shoes will wear socks or other leg coverings substantially different in weight from the sock or leg covering combination which was worn when his boots or shoes were issued, his boots or shoes will be checked for fit in accordance with U. S. Army shoe-fitting methods while he is wearing the new sock or other leg covering combination, and, if necessary, he will be issued a different size of boot or shoe.
- (3) A kickboard approximately 2 inches thick, 4 inches wide, and as long as required, may be nailed or bolted to the top of the shoe-fitting platform at a suitable spot. The individual may get his heels well back into the shoes without lacing them by kicking the heels of the shoes against the kickboard prior to checking the shoes for fit. This also eliminates the inconvenience of unlacing and relacing the shoes if another try-on shoe is required. The use of a kickboard is optional.
  - (4) If an individual wears arch supports or other orthopedic

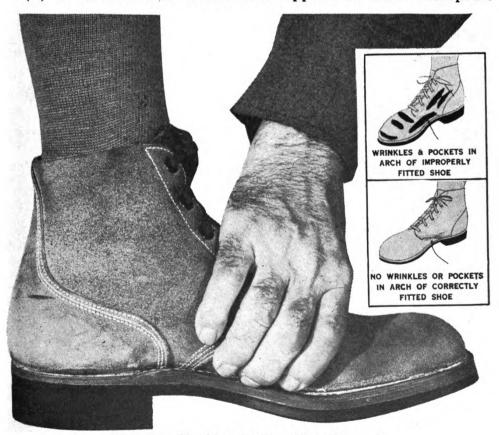


Figure 3. Checking for snug fit under arch.

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appliances, they will be worn when his shoes are checked for fit.

- b. STANDARD SHOE-FITTING TESTS. The following four shoe-fitting tests will be made in checking the fit of all types of military boots and shoes:
- (1) Snug fit under arch is determined by grasping both shoes over the instep with the thumbs on the outer side and the fingers pressing firmly against the under arch close to the outer soles on the inner side of the shoes. (The left hand will grasp the right shoe and the right hand, the left shoe.) The leather should lie snugly against the under arch and be free from excessive wrinkles and fullness. (See fig. 3.)
- (2) Proper position of ball-joint is determined by locating the ball-joint with the thumb of each hand. The ball-joint should lie in the area approximately opposite the widest portion of the shoe just ahead of the curvature of the outer sole into the shank under the arch. (See fig. 4.)

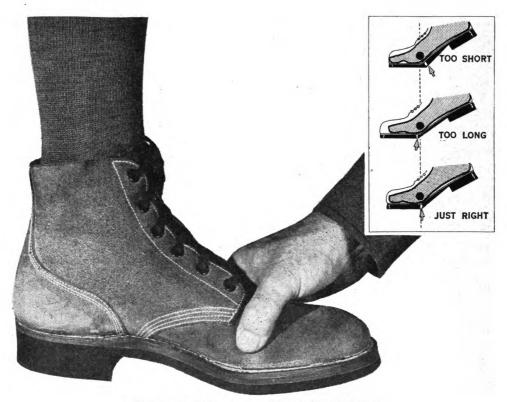


Figure 4. Proper position of ball-joint.

(3) Enough width across the ball of the shoe is determined by pressing both thumbs against the lower inner and outer portions of the vamp of the shoe and working each thumb slowly toward the center until the thumbs nearly meet. The shoe should be filled by the foot without apparent tightness or excessive fullness. Each shoe must be checked separately for width. (See fig. 5.)



Figure 5. Checking width across ball of shoe.

- (4) Sufficient shoe length is determined by pressing down on each shoe with both thumbs at the extreme toe end of the shoe. There should be a clearance or space of at least ½ inch between the end of the longest toe and the end of the shoe. Each shoe must be checked separately for length. If the shoes are made with a hard toe box, this test cannot be made. In such cases, the proper length of shoe will be determined by the position of the ball-joint, the fit under the arch, and the judgment of the shoe-fitter. (See fig. 6.)
- c. Special shoe-fitting tests. The cuff of boots, service, combat should be checked for fit around the leg and trousers when fully buckled. If a longer cuff is required, the tab and buckle may be adjusted or a V-shaped gusset may be inserted in the cuff. Other highcut footwear having buckles, laces, or other types of fasteners should be checked for fit around the leg and trousers when fully buckled, laced, or otherwise fastened. (See fig. 7.)

#### 10. Footwear Size Record

The size of each item of military footwear which is authorized for and issued to an individual will be recorded on his WD AGO Form 32 (Individual Clothing and Equipment Record), or



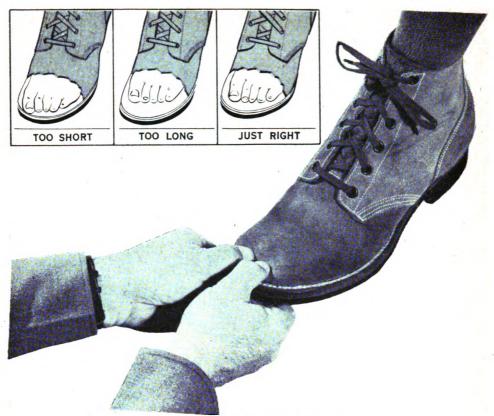


Figure 6. Sufficient shoe length.

WD AGO Form 732 (Individual Clothing and Equipment Record—Women's Army Corps), at the clothing issue warehouse when he is initially fitted. This record will be changed in accordance with



Figure 7. Cuff-fitting check.

any subsequent change in the size of a footwear item which is issued to an individual. The Form 32 (or 732) record of an individual will be made available for the use of the local quartermaster supply officer as required.



#### SECTION III

#### FOOT-MEASURING EQUIPMENT AND PROCEDURES

11. Basic Equipment Required for Proper Fitting of U. S. Army Footwear

In order for large groups of individuals to be properly fitted with footwear as quickly as is practicable and with the least possible error, an accurate foot-measuring outfit must be used in the taking of foot measurements, and suitable fitting tests must be applied in checking the fit of footwear. An appropriate shoe-fitting platform and an adequate stock of each footwear item required should be set up in the shoe-fitting room or section of each quartermaster clothing issue warehouse of an installation which stocks, fits and issues footwear items.

12. Supply of U.S. Army Foot-Measuring Outfits

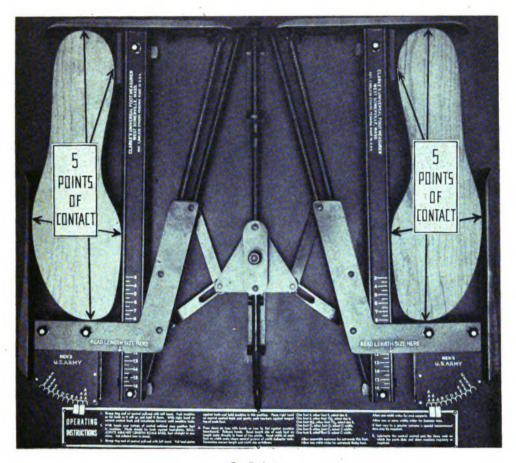
The Quartermaster Corps will supply the following foot-measuring outfits and shoe-fitting devices in accordance with authorized allowances:

- a. Foot-measuring Outfit, Men's, M1943, (Clarke)—Stock 72-F-4988. (Standard item.)
- b. Foot-measuring Outfit, Women's, M1944 (Clarke)—Stock No. 72-F-5300. (Standard item.)
- c. Foot-measuring Outfit, Men's, Brannock—Stock No. 72-F-4975. (Limited standard item—available until exhausted.)
- d. Shoe stretchers with adjustable knobs, designed to stretch shoes so as to relieve pressure from painful corns and bunions. Stock No's. 41-S-5952 to-5954 (Sizes 0, 1, and 2) (Standard item).

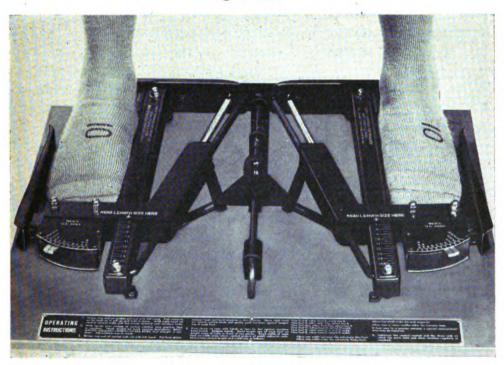
### 13. Operation of Foot-Measuring Outfits

- a. A men's foot-measuring outfit may be used to measure only men's feet, and a women's foot-measuring outfit may be used to measure only women's feet. See section VI for correlation between fitting qualities of shoes, service, and other items of men's foot-wear, and shoes, service, women's, low, as related to other items of women's footwear.
- b. The foot-measuring outfit, men's, M1943, is calibrated to determine the try-on size of shoes, service, and boots, service, combat. The foot-measuring outfit, women's, M1944, is calibrated to determine the try-on size of shoes, service, women's, low. The





1 In use.



② Showing points of contact. Figure 8. Foot-measuring outfit, men's M1943.

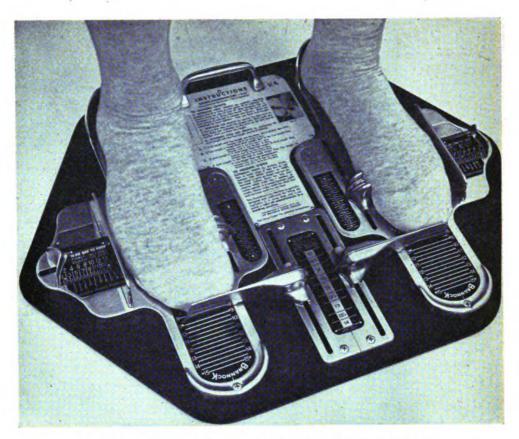


Figure 9. Foot-measuring outfit, men's, Brannock in use.

required sizes of other footwear items may be different from the shoe size indicated by the foot-measuring outfit.

- c. Both feet should be measured on the standard U. S. Army foot-measuring outfit at the same time and in a standing position. When being foot-measured, the individual will wear the sock combination which will be worn with the type of shoe with which he will be fitted. (See sec. VI for sock combinations.)
- d. The foot-measuring outfit is an excellent guide for determining the try-on shoe size. The properly fitted shoe size can be determined only by trying on *both* shoes and properly checking them for correct fit.
- e. If a foot-measuring outfit is to be used on a shoe-fitting platform, nail a wooden strip approximately  $\frac{1}{2}$  inch wide and  $\frac{5}{16}$  inch thick onto the platform in front and in back of the baseboard of the outfit. This will prevent the foot-measuring outfit from sliding out of a position during the foot-measuring operations.
- f. When a foot-measuring outfit is not available, the proper length and width of shoe required by the individual may be determined only through the trial and error method of trying on various sizes of shoes until the proper fitting size is found. This

method will be used only in an emergency and, when used, both shoes will be tried on and carefully checked for fit in accordance with the shoe-fitting tests outlined in this manual.

# 14. Instructions for Use of Foot-Measuring Outfit, Men's, M1943 (Clarke) (figs. 8 @ and 10)

- a. Grasp the ring end of the central pull-rod with the left hand and push the machine as far back as it will go. While holding the machine in this position with the left hand, place the right hand on the central control knob and pull the toe pieces forward until the machine locks. Remove the hands from the machine.
- b. The enlisted man, with his shoes removed and wearing the sock combination which he will wear with the shoes with which he will be fitted, steps upon the shoe-fitting platform and is seated. The foot-measuring outfit is directly below his knees so that each leg and foot forms an approximate right angle. In this position, the legs and feet are free and thus the feet may be easily and properly positioned on the machine.
- c. The operator places his hands over the insteps of the seated enlisted man, and positions both feet on the machine. The heels should be back against the heel-plates, the ball-joints up against the length scale bars, and the feet straight in the machine. The enlisted man should be asked to *stand*. Remove the hands from the feet.
- d. Grasp the ring end of the central pull rod with the left hand and pull the heel plates against the heels. While holding the machine in this position with the left hand, place the right hand on the central control knob and gently push the toe bars against the longest toe of each foot. Remove the hands from the machine.
- e. Press down on the toes of both feet with the hands so the toes lie flat against the machine baseboard. Remove the hands from the toes. The length and width shoe sizes of each foot are now automatically registered on the machine length and width scales. The length sizes are shown on the length scales directly in front of the toe plates. The widths are shown on the width scales by the central groove in the movable width indicators.
- f. To determine the correct length size of shoe to select for initial trial fitting, compare the machine-registered length size of each foot as follows:
- (1) If both feet register the same length size, select a shoe of that size for initial try-on fitting. *Example*: One foot 8, other foot 8, select size 8 shoe.
- (2) If one foot registers one-half size longer, select a shoe of the longer size for initial try-on fitting. *Example*: One foot 8, other  $7\frac{1}{2}$ , select size 8 shoe.



- (3) If one foot registers one full size longer, select a size of shoe halfway between the two sizes for initial try-on fitting. Example: One foot  $8\frac{1}{2}$ , other foot  $7\frac{1}{2}$ , select size 8 shoe.
- (4) If the feet vary to a greater extreme in length size, a special measurement shoe may be required.
- g. To determine the correct width of shoe to select for initial trial fitting, compare the machine-registered width of each foot as follows:
- (1) If both feet register the same width, select a shoe of that width for initial try-on fitting. *Example*: One foot C, other foot C, select C width shoe.
- (2) If one foot registers one full width wider, select a shoe of the wider width for initial try-on fitting. *Example*: One foot B, other foot C, select C width shoe.
- (3) If one foot registers two widths wider, select a shoe width halfway between the two width extremes for initial try-on fitting. *Example*: One foot B, other foot D, select C width shoe.
- (4) If the feet vary in width to a greater extreme, a special measurement shoe may be required.
  - (5) Fit special types of feet as follows:
- (a) Allow one width wider than the machine registers for an extremely high instep or a soft fleshy foot.
- (b) Allow one width narrower than the machine registers for an extremely low instep or a thin bony foot.
- (c) Allow at least one width wider than the machine registers if the enlisted man will wear arch supports in his shoes or boots.
- (d) Allow one width or more wider than the machine registers for extreme hammer toes.
- h. As a general rule when one foot measures longer than the other foot, the longer foot measures one width narrower. In such cases, a shoe of the longer size and narrower width should be selected for initial try on fitting. Example: One foot  $8\frac{1}{2}B$ , other foot 8C, select size  $8\frac{1}{2}B$  shoe. One foot 9B, other foot 8C, select size  $8\frac{1}{2}B$  shoe.
- i. Whenever the length or width measurement of one foot is more than one size different from the length or width measurement of the other foot, mismated sizes of stock shoes may be issued.
- j. Lubricate the central pull-rod as required. Use any good grade of light-weight machine oil. Clean and brush the machine at least once a week if the machine is used constantly.



Figure 10. Foot-measuring outfit, men's, M1943, in use in shoe-fitting room.

# 15. Instructions for Use of Foot-Measuring Outfit, Women's, M1944 (Clarke)

The operation of the foot-measuring outfit, women's, M1944, is the same as the operation of the foot-measuring outfit, men's, M1943.

### Instructions for Use of Foot-Measuring Outfit, Men's, Brannock (See fig. 9)

- a. Push the ball-joint indicators to the heel end of the ball-joint indicator slots, slide the width bars as far to the outside as they can go, and pull the heel-to-toe length indicator slide bars as far forward toward the operator as they will go.
  - b. The enlisted man, with his shoes removed and wearing the

sock combination which he will wear with the shoes with which he will be fitted, steps upon the shoe-fitting platform and is seated. The foot-measuring outfit is directly below his knees so that each leg and foot forms an approximate right angle. In this position the legs and feet are free and thus the heels may be easily and properly positioned on the machine.

- c. The operator places his hands over the insteps of the seated enlisted man and positions both feet on the machine. The heels must be completely back into the heel cups, and the feet so positioned on the machine that the inner edges of the feet almost cover the slots through which the ball-joint indicators slide. It should be noted that three separate measurements are required when using the Brannock outfit. These measurements are:
  - (1) Heel-to-ball length.
  - (2) Heel-to-toe length.
  - (3) Width.
- d. Hold the feet of the enlisted man firmly against the back of the heel cups with the hands around the ankles and the fingers around the back of the heel cups, and ask the enlisted man to stand on the machine.
- e. Locate the ball-joint of the right foot with the thumb of the left hand and slide the ball-joint indicator forward with the other hand. Fit the inner curved surface of the ball-joint indicator around the ball-joint of the foot so that the two high ribs of the ball-joint indicator touch the thumb of the machine operator, and the low middle rib of the ball-joint indicator touches the ball-joint bone of the foot being measured. (See the photographic illustration on the instruction plate attached to the baseboard of each machine.) Read the size indicated on the heel-to-ball scale by the pointer of the ball-joint indicator. Adjust the ball-joint indicator around the ball-joint of the left foot and determine the heel-to-ball size of that foot in the same manner. The heel-to-ball or arch length size of each foot is now determined as follows:
- (1) If both feet measure the same size, select that size as the heel-to-ball or arch length size of both feet. *Example*: One foot 7, other foot 7, select 7.
- (2) If one foot measures one-half size longer, select the longer size as the heel-to-ball or arch length size of both feet. *Example*: One foot  $6\frac{1}{2}$ , other foot 7, select 7.
- (3) If one foot measures one full size longer, select the size halfway between the two as the heel-to-ball or arch length size of both feet. *Example*: One foot  $6\frac{1}{2}$ , other  $7\frac{1}{2}$ , select 7.
- (4) If the feet vary to a greater extent in heel-to-ball or arch length size, a special measurement shoe may be required.

- f. Press down on the toes of the right foot with the left hand so the toes lie flat against the base of the machine. Grasp the thick end of the heel-to-toe length indicator slide bar with the other hand and lightly push the bar against the end of the longest toe. Release the hands. Do not force the toes back by pushing the heel-to-toe length indicator slide bar too firmly against the toes since the foot-measuring outfit might then register a short heel-to-toe length size. Read the length size indicated on the heel-to-toe length scale by the thin end of the heel-to-toe length indicator slide bar. Measure the left foot and determine the heel-to-toe length size in the same manner. The heel-to-toe length size of each foot is determined as follows:
- (1) If both feet measure the same size, select that size as the heel-to-toe length size of both feet. *Example*: One foot 7, other foot 7, select 7.
- (2) If one foot measures one-half size longer, select the longer size as the heel-to-toe length size of both feet. *Example*: One foot  $6\frac{1}{2}$ , other foot 7, select 7.
- (3) If one foot measures one full size longer, select the size halfway between the two as the heel-to-toe length size of both feet. Example: One foot  $6\frac{1}{2}$ , other foot  $7\frac{1}{2}$ , select 7.
- (4) If the feet vary to a greater extent in heel-to-toe length size, a special measurement shoe may be required.
- g. To determine the correct length of shoe size for initial trial fitting, compare the heel-to-ball or arch length size with the heel-to-toe length size, and determine the proper shoe size in the following manner:
- (1) If the toe length and arch length size are the same, select that size as the shoe size. *Example*: Toe length 9, arch length 9, shoe size 9.
- (2) If the toe length is longer than the arch length, select the toe length size as the shoe size. Example: Toe length  $9\frac{1}{2}$ , arch length 9, shoe size  $9\frac{1}{2}$ ; toe length 10, arch length 9, shoe size 10.
- (3) If the arch length is longer than the toe length by  $\frac{1}{2}$  size or more, the shoe size will be  $\frac{1}{2}$  size longer than the heel-to-toe size. Example: Arch length 9, toe length  $8\frac{1}{2}$ , shoe size 9; arch length  $9\frac{1}{2}$ , toe length  $8\frac{1}{2}$ , shoe size 9; arch length 10, toe length  $8\frac{1}{2}$ , shoe size 9.
- h. Before adjusting the width bars, make sure the heels are firmly back against the heel blocks, and the ball-joints are snugly fitted into and against the inner, curved portion of the ball-joint indicators.
- i. Push the width indicator bars against the side of the feet without squeezing the feet. Remove hands. Press down on the



toes of both feet with the hands so the toes lie flat against the base of the machine. Remove hands.

j. Select the same size number on the width bar as the length size just determined. Follow down the line on the width bar representing this size, and select the width on the width scale nearest this line. If this line registers halfway between two widths, select the wider. Determine the width of shoe to select for initial trial fitting as outlined in paragraph 14g. (See par. 14h and i.)

17. Shoe Fitting Room or Section

a. GENERAL. Each quartermaster clothing issue warehouse of an installation which stocks, fits, and issues footwear items will set up a suitable foot-measuring and shoe-fitting room or section. Provision will be made for the inclusion of a shoe-fitting platform of suitable design, and a sufficient supply of foot-measuring outfits, footwear items, chairs, benches, and tables. The establishment of a shoe-fitting room or section aids in efficient foot measurement, in checking of shoes for fit, and in expediting the processing of large groups of individuals.

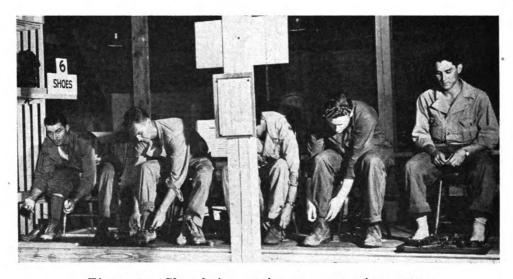


Figure 11. Shoe-fitting section at a reception center.

- b. SHOE-FITTING PLATFORM. The following four types of shoe-fitting platforms are recommended. The type of platform to install will depend upon the number of individuals processed daily, the physical arrangement of the clothing issue warehouse, and the available warehouse space. Each platform may be altered to suit local conditions.
- (1) The shoe-fitting platform shown in figure 12 is recommended for the quartermaster clothing issue warehouse of a post, camp or station which processes less than 100 individuals daily.

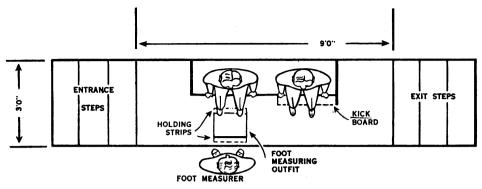
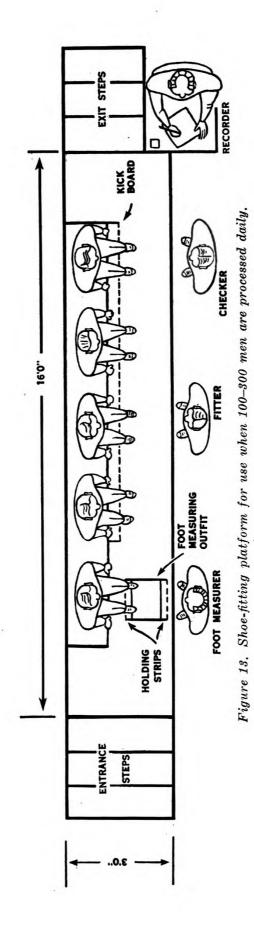


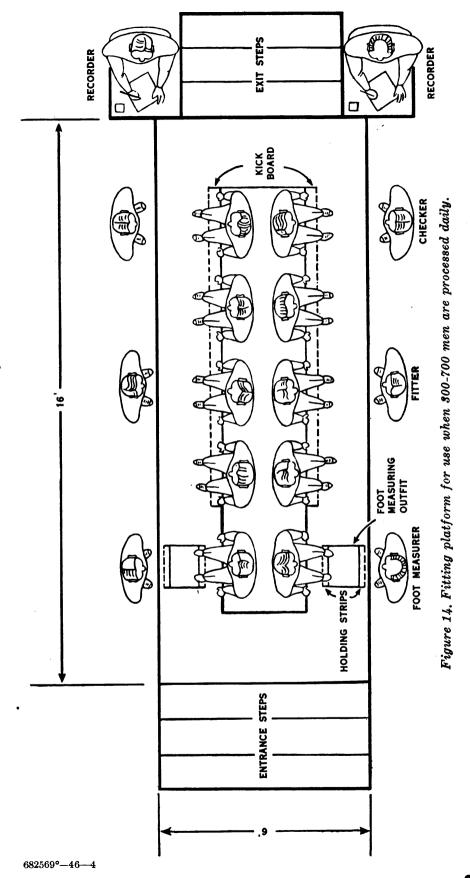
Figure 12. Shoe-fitting platform for use when up to 100 men are processed daily.

It is 9 feet long, 3 feet wide, and 34 inches high. The bench is 5 feet long, 14 inches wide, and 18 inches high. The kickboard is 2 feet long, 2 inches thick and 4 inches wide. One properly trained individual will be required to perform the following operations:

- (a) Operate the foot-measuring outfit.
- (b) Obtain the required shoe size from stock.
- (c) Try on and check the fit of both shoes.
- (d) Record the final fitted shoe size on WD AGO Form 32 (or 732).
- (2) The shoe-fitting platform shown in figure 13 is recommended for the quartermaster clothing issue warehouse of an installation which processes from 100 to 300 individuals daily. It is 16 feet long, 3 feet wide, and 34 inches high. The bench is 12 feet long, 14 inches wide, and 18 inches high. The kickboard is 9 feet long, 2 inches thick and 4 inches wide. Six properly trained individuals are required to operate this unit:
  - (a) One foot-measuring outfit operator.
  - (b) One initial trial shoe fitter.
  - (c) One final shoe-fitting checker.
  - (d) Two stock feeders.
  - (e) One WD AGO Form 32 (or 732) recorder.
- (3) The shoe-fitting platform shown in figure 14 is recommended for the quartermaster clothing issue warehouse of an installation which processes from 300 to 700 individuals daily. It is 16 feet long, 6 feet wide, and 34 inches high. The two-way bench is 12 feet long, 28 inches wide, and 18 inches high. The kickboard is 9 feet long, 2 inches thick and 4 inches wide. Ten trained individuals are required to operate this unit:
  - (a) Two foot-measuring outfit operators.
  - (b) Two initial trial shoe fitters.
  - (c) Two final shoe-fitting checkers.
  - (d) Two or more stock feeders.
  - (e) Two WD AGO Form 32 (or 732) recorders.







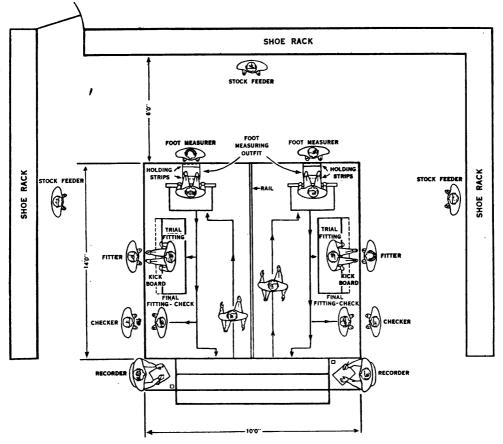


Figure 15. Shoe-fitting platform for use when 700 or more men are processed daily.

- (4) The shoe-fitting platform shown in figure 15 is recommended for the quartermaster clothing issue warehouse of an installation which processes 700 or more individuals daily. It is 14 feet long, 10 feet wide, and 34 inches high, with a rail 4 feet high through the center. A chair or stool should be set up back of each foot-measuring outfit. The benches are 10 feet long, 14 inches wide and 18 inches high. The kickboard is 10 feet long, 2 inches thick and 4 inches wide. A complete stock of shoes may be racked on three sides of the platform. Eleven trained individuals are required to operate this unit:
  - (a) Two foot-measuring outfit operators.
  - (b) Two initial trial shoe fitters.
  - (c) Two final shoe-fitting checkers.
  - (d) Three or more stock feeders.
  - (e) Two WD AGO Form 32 (or 732) recorders.

#### SECTION IV

# SPECIAL MEASUREMENT SHOES AND ORTHOPEDIC APPLIANCES

#### 18. Special Measurement Shoes

Individuals who cannot be fitted properly with boots or shoes within the regular or supplemental tariff size ranges will be issued special measurement boots or shoes within authorized allowances, as follows:

- a. If the measurements and characteristics of the feet can be clearly described (on the special measurement blank) without the use of a plaster cast, a properly executed special measurement blank, WD AGO Form 10-101 (Special Measurement Blank—U. S. Army Leather Boots and Shoes) will be made out by the home station and forwarded, with the covering requisition, direct to the Boston Quartermaster Depot, Boston, Massachusetts.
- b. If the feet of an individual are disabled, deformed or distorted to the extent that a plaster cast is required to clearly describe their measurements and characteristics, the individual will be supplied with special measurement orthopedic footwear through designated general hospitals or the Orthopedic Footwear Clinic of the Boston Quartermaster Depot, in accordance with existing regulations.

### 19. Orthopedic Shoe Adjustments and Appliances

Required orthopedic adjustments applicable to military shoes, even though of a minor nature, and orthopedic appliances required by an individual must be prescribed by a medical officer.



# SECTION V SOCK FITTING AND SIZE CORRELATION

#### 20. Fitting of Socks

- a. FITTING PROCEDURE. (1) Individuals will be fitted with the sock, stocking or anklet combination authorized for wear with each type of military boot or shoe prior to being foot-measured and fitted with military footwear. (See sec. VI.)
- (2) The sock should be fitted by the foot without apparent tightness or excessive fullness. There should be an excess length clearance at the toe of at least  $\frac{3}{8}$  inch to allow for shrinkage. Heavy wool socks will be fitted slightly longer.
- (3) The sock-fitting check will be made while the individual is wearing both socks in a standing position with the weight evenly distributed on both feet.
- (4) A sock that is too short, too long, or too full may cause foot trouble and thus nullify the advantages of a properly fitted shoe. If two pairs of socks are worn, the outer pair will be at least  $\frac{1}{2}$  size longer than the under pair.
- (5) If an individual wears a sock combination substantially different in weight from the sock combination which he wore when fitted with a footwear item, the boot or shoe may be uncomfortably large or so tight as to restrict the circulation of the blood.
- b. SIZE CORRELATION OF SOCKS AND SHOES. Because of the variation in the elasticity of socks, stockings, and anklets which are made of different yarns, the following size correlation of sock and shoe sizes is to be used only as a *guide* for the issue of sock sizes. The required sock size can be accurately determined only if the socks are tried on and properly checked for fit.

Men's shoe size	Try-on size of socks, cotton, tan, socks, wool, light, socks, wool, cushion-sole	Women's shoe size	Try-on size of stockings, cotton, women's stockings, rayon, women's anklets, wool, women's
4-4½		21/2-3-31/2	8
5-5½-6		4-41/2	- · <b>-</b>
$6\frac{1}{2}$ -7-7\frac{1}{2}		5-51/2-6	9
8-81/2-9	11	$6\frac{1}{2}$ -7-7\frac{1}{2}	
9½-10-10½	11½	8-81/2-9	10
$11-11\frac{1}{2}-12$	12	$9\frac{1}{2}-10-10\frac{1}{2}$	
121/2-13-131/2-14	13	11-111/2-12	11
141/2-15-151/2		,_	

The required sock size may vary from the above schedule if the foot has an extremely high or an extremely low instep, or if the foot is very narrow or very wide. Heavy woolen socks or anklets will usually be fitted one-half size longer than shown above to allow for shrinkage.

#### SECTION VI

# SIZE DATA FOR BOOTS AND SHOES, INCLUDING APPROVED SOCK COMBINATIONS

#### 21. General

This section illustrates each principal item of standard Army footwear, and provides data on the range of sizes and widths available within the regular size tariff of each item. It also specifies the approved sock combination and insoles to be worn with each type.

- a. The approximate trial fitting size of each item is shown in relation to the size of shoes, service (or boots, service, combat—which fit alike) required by the same individual.
- b. If more than one model of an item is available in stock, each of which has different fitting characteristics, fitting data are given on each model.
- c. It is intended that these data will provide a useful guide in determining the try-on size of each item for fitting purposes, and will also help in the preparation of sized requisitions for a given group of individuals.

22. Boots, Blucher, High-top

Boots, Blucher, High-top (Standard item) Stock Nos. 72-B-128-12 through 132-18, are available in whole and half sizes, 5 through 15, widths C through EE, and when worn with approved combination of heavy socks and felt insoles, fit approximately the same as Shoes, service, for example:

Size worn in shoes, service	Size worn in boots, blucher, high-top
7C	7C
8½D	8½D
1B	11B

The approved sock combination to be worn with each pair of . Boots, blucher, high-top, is:

One pair Socks, wool, cushion-sole.

One pair Socks, wool, ski.

One pair of Insoles, felt, is worn with each pair of Boots, blucher, high-top.

Two pairs of Insoles, felt, are packed with each pair of boots.



#### 23. Boots, Knee, Wader, M1945

Boots, Knee, Wader, M1945 (Standard item) Stock Nos. 72-B-343-605 through 343-655, are available in whole sizes 5 through 15. They are worn over Shoes, service, or Boots, service, combat, and fit approximately as follows:

Size worn in shoes, service, or boots, service, combat (all widths)	Size worn in boots, knee, wader, M1945	Size worn in shoes, service, or boots, service, combat (all widths)	Size worn in boots, knee, wader, M1945
5, 5½ and 6	6	10½ and 11	11
6½ and 7	7	11½ and 12	12
7½ and 8	8	12½ and 13	13
8½ and 9	. 9	13½ and 14	14
9½ and 10	10	14½ and 15	15

#### 24. Boots, Knee, Wader

Boots, Knee, Wader (Standard item) Stock Nos. 72-B-343-510 through 343-555 are available in whole sizes 6 through 15, in theaters of operations only. They are worn over Shoes, service, or Boots, service, combat, and fit approximately as follows:

Size worn in shoes, service or boots, service, combat	Size worn in boots, knee, wader	Size worn in shoes, service or boots, service, combat	Size worn in boots, knee, wader
4½ D, E and EE 5—all widths 5½ A, B and C	6	9½ D, E and EE 10—all widths 10½ A, B and C	11
5½ D, E and EE 6—all widths 6½ A, B and C	7	10½ D, E and EE 11—all widths 11½ A, B and C	12 .
6½ D, E and EE 7—all widths 7½ A, B and C	8	11½ D, E and EE 12—all widths 12½ A, B and C	13
7½ D, E and EE 8—all widths 8½ A, B and C	9	12½ D, E and EE 13—all widths 13½ A, B and C	14
8½ D, E and EE 9—all widths 9½ A, B and C	10	13½ D, E and EE 14—all widths 14½ A, B and C	15

### 25. Boots, Leather, Laced, Legging-top and Boots, Leather, Laced, Enlisted Men's

Boots, Leather, Laced, Legging-top (Standard item) Stock Nos. 72–B–830–10 through 845–50, are available in whole and half sizes, 5 through 12, widths A through EE in regular tariff and 12½ through 15, widths A through EE in supplemental tariff. Boots, Leather, Laced, Enlisted Men's (Limited standard item) Stock Nos. 72–B–391 through 596, are to be issued until exhausted as a substitute for the standard legging-top boots, size for size.

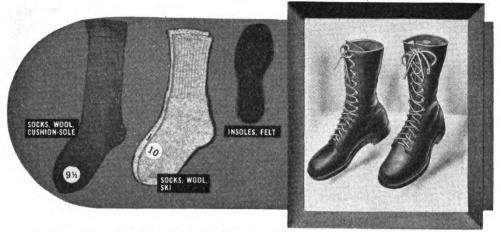


Figure 16. Boots, blucher, high-top, with approved sock combination.



Figure 17. Boot, knee, wader, M1945.

Both boots will fit approximately the same as the Shoes, service, normally worn when fitted over one pair of Socks, wool, cushion-sole. The approved sock combination to be worn with each pair of Boots, leather, laced, EM, or Boots, leather, laced, legging-top, is:

One pair Socks, wool, cushion-sole or
One pair Socks, wool, heavy

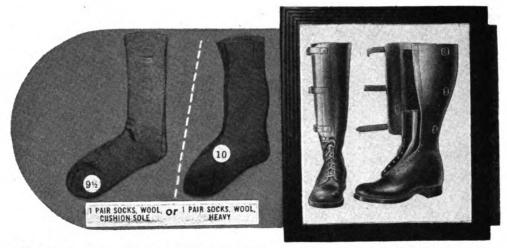


Figure 18. Boots, leather, laced, legging-top with approved sock combination.

26. Boots, Mukluk

Boots, Mukluk (Standard item) Stock Nos. 72-B-1130 through 1132, are furnished in three sizes only, and fit approximately as follows:

Size worn in shoes, service (All widths)	Size worn in boots, mukluk
5 through 7	Small
5 through 7	Medium
10 and up	Large

The approved sock combination to be worn with each pair of mukluks is:

One pair Socks, wool, cushion-sole and

Two pairs Socks, wool, ski, graduated sizes and

One pair Socks, felt

Two pairs of Insoles, felt, are worn with each pair of mukluks.

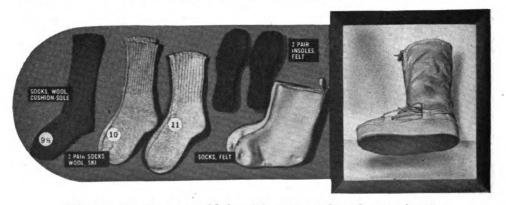


Figure 19. Boots, mukluk with approved sock combination.

27. Boots, Rubber, Hip Boots, Rubber, Hip (Standard item) Stock Nos. 72-B-1149 through 1168, are available in whole sizes 5 through 15, only one width, and fit approximately as follows:

	,	Width	worn i	n shoe,	servic	e
Size worn in shoe, service	A	В	c	D	E	EE
		Boo	ts', rub	ber, hi	p size	
5	5	5	5	6	6	7
5½	6	6	6	6	7	7
6	6	6	6	7	7	8
6½	7	7	7	7	8	8
7	7	7	7	8	8	8
7½	8	8	8	8	9	9
8	8	8	8	9	9	10
8½	9	9	9	9	10	10
9	9	9	9	10	10	11
9½		10	10	10	11	11
10	10	10	10	11	11	12
10½		11	11	11	12	12
11	11	11	11	12	12	12
11½		12	12	12	13	13
12	12	12	12	13	13	14
13		13	13	14	14	15
13½		14	14	14	15	15
14		14	14	15	15	_
14½		15	15	15	_	_
15		15	15	_	_	_



Figure 20. Boots, rubber, hip, with approved sock combination.

The approved sock combination to be worn with each pair of Boots, rubber, hip is:

One pair Socks, wool, heavy

One pair Socks, wool, ski

28. Boots, Rubber, Knee, M-1937

Boots, Rubber, Knee M1937 (Standard item) Stock Nos. 72-B-1261 through 1271, are available in whole sizes 5 through 15, only one width, and fit approximately as follows:

	w	idth w	orn in	shoe, s	ervice	
Size worn in shoe, service	A	В	С	D	E	EE
•		Boots,	rubbei	, knee	size	
5	5	5	5	6	6	6
5½	6	6	6	6	6	7
6	6	6	6	7	7	7
6½	7	7	7	7	7	8
7	7	7	7	8	8	8
7½		8	8	8	8	9
8	8	8	8	9	9	9
8½	9	9	9	9	9	10
9	9	9	9	10	10	10
9½	10	10	10	10	10	10
10	10	10	10	11	11	11
10½	11	11	11	11	11	12
1	11	11	11	12	12	12
11½	12	12	12	12	12	_
12	12	12	12	_	_	_

The approved sock combination to be worn with each pair of Boots, rubber, knee, is:

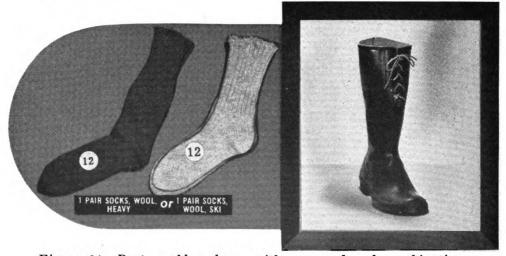


Figure 21. Boots, rubber, knee, with approved sock combination.

One pair Socks, wool, heavy or
One pair Socks, wool, ski

29. Boots, Service, Combat, Composition-sole

Boots, Service, Combat, Composition-sole (Standard item) Stock Nos. 72–B–2740–20 through –2746–41, are available in whole and half sizes, 3EEE through 15½EEEE, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 5 through 12 in widths A, B, C, D, E and EE. This item fits the same as Shoes, service, reversed-uppers, composition-sole, when worn with the same type of socks. The approved socks\* to be worn when fitted with Boots, service, combat, composition-sole, are:

One pair of Socks, wool, cushion-sole or

Two pairs of Socks, wool, light

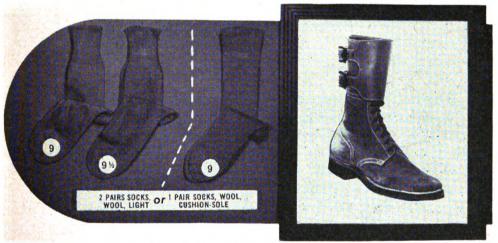


Figure 22. Boots, service, combat, composition-sole with approved sock combination.

30. Boots, Service, Combat, Women's

Boots, Service, Combat, Women's (Standard item) Stock Nos. 72-B-2764-58 through 2774-18, are available in whole and half sizes, 2½ through 12, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 4 through 10; most sizes are available in eight widths AAAA through E.

a. Boots, service, combat, women's, fit size for size approximately the same as Shoes, field, women's (when worn with the approved sock combination). The correct size of Boots, service,

<sup>\*</sup> The outside pair should be at least one-half size longer than the inside pair.

combat, women's, to be worn by each individual is determined in accordance with the procedure outlined in this manual.

b. The approved sock combination to be worn with each pair of Boots, service, combat, women's is:

One pair of Stockings, cotton, women's and
One pair of Anklets, wool, women's



Figure 23. Boots, service, combat, women's, with approved sock combination.

# 31. Boots, Ski-Mountain, with Rubber-cleated Sole and Boots, Ski-Mountain

Boots, Ski-mountain, with Rubber-cleated soles (Standard item) Stock Nos. 72–B–2846–10 through 2850–14, and Boots, Ski-mountain (Limited standard) Stock Nos. 72–B–2802–20 through 2811–29, are available in whole and half sizes 5 through 13, widths C through EE, and, when worn with the approved stock and insole combination, will fit approximately one-half size shorter and one width wider than the Shoes, service, normally worn, for example:

Size worn in shoes, service	Size worn in boots, ski-mountain	Size worn in shoes, service	Size worn in boots, ski-mountain
7C	6½D	11B	10½C
8½D	8 <b>E</b>	12A	11½B

The approved sock combination to be worn with each pair of Boots, ski-mountain, is:

One pair of Socks, wool, cushion-sole and

Two pairs of Socks, wool, ski, in graduated sizes One pair of Insoles, felt, is worn with each pair of Boots, skimountain.

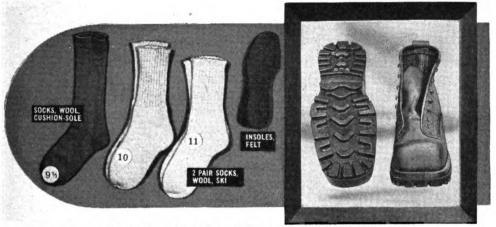


Figure 24. Boots, ski-mountain, with rubber-cleated sole with approved sock combination.

32. Overshoes, Arctic, M1945

Overshoes, Arctic, M1945 (Standard item) Stock Nos. 72-0-625 through 635, are available in whole sizes 5 through 15, only one width, and when worn with Shoes, service, or Boots, service, combat, fit approximately as follows:

Size worn in shoes, service (All widths)	Size worn in overshoes, Arctic, M1945	Size worn in shoes, service (All widths)	Size worn in overshoes Arctic, M1945
5	5	10½	11
5½	6	11	11
6	6	11½	12
6½	7	12	12
7	7	12½	13
7½	8	13	13
8	8	13½	14
8½	9	14	14
9	9 .	14½	15
9 ½	10	15	15
10	10		



Figure 25. Overshoes, Arctic, M1945.

33. Overshoes, Arctic

Overshoes, Arctic (Limited Standard) Stock Nos. 72-0-275 through 72-0-295, are available in whole sizes 5 through 15, only one width, and when worn with Shoes, service, or Boots, service, combat, fit approximately as follows:

		Sho	e or be	oot wid	lth	
Shoe or boot size	A	В	С	D	E	EE
		Size of	fovers	hoes, A	retic	
5	5	5	5	6	6	6
5½	6	6	6	7	7	7
6	6	6	6	7	7	7
6½	7	7	7	8	8	8
7	7	7	8	8	8	8
71/2	8	8	8	9	9	9
8	8	8	9	9	9	9
8½	9	9	9	10	10	10
9	9	9	10	10	10	10
9½	10	10	10	11	11	11
10	10	10	11	11	11	11
10½	11	11	11	12	12	12
11	11	11	12	12	12	12
11½	12	, 12	12	13	13	13
12	12	12	13	13	13	13

34. Overshoes, Arctic, All-rubber and Overshoes, Arctic, Cloth-top

Overshoes, Arctic, all-rubber (Limited standard item) Stock Nos. 72-0-400 through 422, and Overshoes, Arctic, Cloth-top (Limited standard item) Stock Nos. 72-0-450 through 472, are available in whole sizes 4 through 6, only one width, and when worn with Shoes, service, or Boots, service, combat, fit approximately as follows:

			Wi	dth		
Boot size	A	В	С	D	E	EE
	Size	e of ov	ershoer hoes, A			. or
5	6	6	6	7	7	7
5½	7	7	7	8	8	8
6	7	7	7	8	8	8
6½	8	8	8	9	9	9
7	8	8	8	9	9	9
7½	9	9	9	10	10	10
8	9	9	9	10	10	10
8½	10	10	10	11	11	11
9	10	10	10	11	11	11
9½	11	11	11	12	12	12
10	11	11	11	12	12	12
10½	12	12	12	13	13	13
11	12	12	12	13	13	13
11½	13	13	13	14	14	14
12	13	13	13	14	14	14

35. Overshoes, Arctic, Women's, 4-buckle M1944

Overshoes, Arctic, Women's, 4-buckle M1944 (Standard item) Stock Nos. 72-0-737-100 through 737-300, are available in whole sizes 3 through 13, and when worn with Shoes, field, women's, made with leather or composition soles, fit approximately as follows:

		Shoe or boot width										
Shoe or boot size	AAAA	AAA	AA	A	В	c	D	E				
		Size of overshoes, Arctic, women's, 4-buckle, M1944										
4	- 1	_	4	4	4	4	4.	4				
4½	-	_	5	5	5	5	5	5				
5	_	5	5	5	5	5	5	5				
5½	1 - i	6	6	6	6	6	6	6				
6	6	6	6	6	6	6	6	6				
6½	7	7	7	7	7	7	7	7				
7	7	7	7	7	7	7	7	7				
7½	8	8	8	8	8	8	8	8				
8	8	8	8	8	8	8	8	8				
8½	9	9	9	9	9	9	9	9				
9	9	9	9	9	9	9	9	9				
9½	10	10	10	10	10	10	10	10				
0	10	10	10	10	10	10	10	10				



Figure 26. Overshoes, Arctic, women's, 4-buckle, M1944.

# 36. Overshoes, Arctic, Women's, 4-buckle

Overshoes, Arctic, Women's 4-buckle (Standard item) Stock Nos. 72-0-735-25 through 736-40, are available in whole sizes 3 through 13, in only one width, and when worn with Shoes, field, women's, made with composition soles, or Boots, service, combat, women's, fit approximately as follows:

		Boot or shoe width										
Boot or shoe size	AAAA	AAA	AA	A	В	c	D	E				
		Overshoe size										
4	<del>'</del>   —		5	51/2	6	6	61/2	6 1/2				
4½	.   —	l —	51/2	6	61/2	61/2	7	7				
5	.   —	6	6	61/2	7	7	71/2	7½				
5½	.   —	61/2	61/2	7	71/2	7½	8	8				
6	. 7	7	7	7½	8	8	81/2	81/2				
6½	71/2	7½	71/2	8	81/2	81/2	9	9				
7	8	8	8	81/2	9	9	91/2	91/2				
7½	81/2	81/2	81/2	9	91/2	91/2	10	10				
8	. 9	9	9	91/2	10	10	101/2	101/2				
8½	91/2	91/2	91/2	10	101/2	101/2	11	11				
9	10	10	10	101/2	11	11	12	12				
9½	10½	101/2	101/2	11	12	12	12	12				
10	11	11	11	12	12	12	12	12				

When Overshoes, Arctic, women's 4-buckle are worn with Shoes, field, women's, made with leather soles, they fit approximately as follows:

		Shoe width									
Shoe size	AAAA	AAA	AA	A	В	c	D	Æ			
	Overshoe size										
4	T	Γ—	4 1/2	41/2	5	5	5	5			
4½		_	5	5	51/2	51/2	51/2	5 1/2			
5		51/2	5 1/2	51/2	6	6	6	6			
5½		6	6	6	61/2	61/2	61/2	61/2			
6	61/2	6 1/2	61/2	61/2	7	7	7	7			
6½	7	7	7	7	71/2	71/2	71/2	7½			
7	71/2	71/2	7½	71/2	8	8	8	8			
7½	8	8	8	8	81/2	81/2	81/2	81/2			
8	81/2	81/2	81/2	81/2	9	. 9	9	9			
8½	9	9	9	9	91/2	91/2	91/2	91/2			
9	1	9 1/2	91/2	91/2	10	10	10	10			
9½	10	10	10	10	101/2	101/2	10½	10½			
10	101/2	10½	101/2	101/2	11	11	11	11			

Note. Overshoes, Arctic, women's, 4-buckle, made by the Hood Rubber Company, must be fitted at least one-half size longer than indicated above.



37. Overshoes, Arctic, Cold-climate, Women's

Overshoes, Arctic, Cold-climate, Women's (Standard item) Stock Nos. 72-0-580-through 584, are worn over Shoes, felt, women's and fit approximately as follows:

Size worn in *shoes, felt, women's	Size worn in overshoes, Arctic, cold-climate, women's
Small	Small
Medium	Medium
Large	Large

<sup>\*</sup> See Shoes, felt, women's, for size correlation with Shoes, field, women's.



Figure 27. Overshoe, Arctic, cold-climate, women's.

38. Overshoes, Boat, Safety-sole

Overshoes, Boat, Safety-sole (Standard item), Stock Nos. 72–0–755 through 765, are available in whole sizes, 5 through 15, only one width, and when worn with Shoes, service or Boots, service, combat, will fit approximately the same as Overshoes, Arctic, safety-sole, and Overshoes, Arctic.



Figure 28. Overshoes, boat, safety-sole.

#### 39. Overshoes, Low, Women's

Overshoes, Low, Women's (Standard item) Stock Nos. 72-0-1410 through 72-0-1446, are worn over Shoes, service, women's, low, and are available in whole and half sizes 3 through 12, widths regular and wide. The "regular" width overshoes fit satisfactorily over Shoes, service, women's, low, size for size, on all widths except C, D, and E. The "wide" width fits satisfactorily over C, D and E widths, for example:

	Shoe width												
Shoe size	AAA	AA	A	В	С	D	E						
		Required size of overshoes											
4	4 R	4 R	4 R	4 R	4 W	4 W	4 W						
4½	4½R	4½R	4½R	4½R	4½W	4½W	4½W						
5	5 R	5 R	5 R	5 R	5 W	5 W	5 W						
5 1/2	5½R	5½R	5½R	5½R	5½W	5½W	5½W						
6	6 R	6 R	6 R	6 R	6 W	6 W	6 W						
61/2	6½R	6½R	6½R	6½R	6½W	6½W	6½W						
7	7 R	7 R	7 R	7 R	7 W	7 W	7 W						
7½	7½R	7½R	7½R	7½R	7½W	7½W	7½W						
8	8 R	8 R	8 R	8 R	8 W	8 W	8 W						
8½	8½R	8½R	8½R	81/2 R	8½W	8½W	81/2 W						
9	9 R	9 R	9 R	9 - R	9 W	9 W	9 W						
91/2	9½R	9½R	9½R	9½R	9½W	9½W	9½W						
LO	10 R	10 R	10 R	10 R	10 W	10 W	10 W						
01/2	10½R	10½R	10½R	10½R	10½W	10½W	10½W						
1	11 R	11 R	11 R	11 R	11 W	11 W	11 W						
1½	11½R	11½R	11½R	11½R	11½W	11½W	11½W						
12	12 R	12 R	12 R	12 R	12 W	12 W	12 W						



Figure 29. Overshoes, low, women's.

# 40. Shoepacs, 12-inch

Shoepacs, 12-inch (Limited standard item) Stock Nos. 72-S-8750 through 8770, are all furnished in only one width and fit approximately as follows:

Size worn in shoes, service	Size worn in shoepacs, 12-inch	Size worn in shoes, service	Size, worn in shoepacs, 12-inch	
5, 5½ 6	6	10½, 11	11	
6½, 7	7	11½, 12	12	
7½, 8	8	12½, 13	13	
8½, 9	9	13½, 14	14	
9½, 10	10	14½, 15		



Enlisted men who wear extremely wide widths of Shoes, service may require Shoepacs one size longer than indicated in the above schedule. The approved sock combination to be worn with Shoepacs, is:

Two pairs of Socks, wool, ski

One pair of Insoles, felt, is worn with each pair of Shoepacs. Two pairs of Insoles, felt, are packed with each pair of Shoepacs, 12-inch. The outside pair of socks should be one-half size to one full size longer than the inside pair.

41. Shoepacs, 12-inch, M1944

Shoepacs, 12-inch, M1944 (Standard item) Stock Nos. 72-S-8790 through 8824, are available in whole sizes 6 through 14, and three widths -N (Narrow), M (Medium) and W (Wide), and fit approximately as follows:

Size worn in shoe, service*	Size worn in Shoepacs, M1944 for A, B, C widths	Size worn in Shoepacs, M1944 for D & E widths	Size worn in Shoepacs, M1944 fo EE and wider width	
5, 5½ and 6	6 N	6 M	6 W	
6½ and 7	7 N	7 M	7 W	
7½ and 8	8 N	8 M	8 W	
8½ and 9	9 N	9 M	9 W	
9½ and 10	10 N	10 M	10 W	
10½ and 11	11 N°	11 M	11 W	
1½ and 12	12 N	12 M	12 W	
2½ and 13	13 N	13 M	13 W	
3½ and 14	14 N	14 M	14 W	

<sup>\*</sup> It is emphasized that Shoepacs must be tried on over the approved sock combination before being issued. The Shoepac sizes shown above are furnished as a guide for length, primarily. When checking for width, make sure there is no pressure on any part of the foot.

The approved sock combniation to be worn with Shoepacs is:

Two pairs of Socks, wool, ski

The outside pair of socks should be one-half to one full size longer

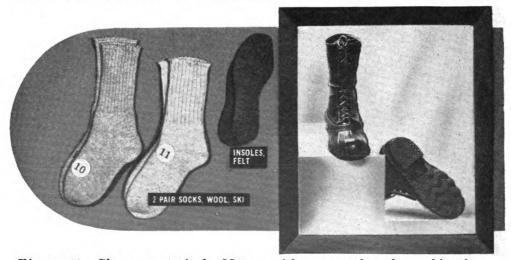


Figure 30. Shoepacs, 12-inch, M1944 with approved sock combination.

than the inside pair. One pair of Insoles, felt, is worn with each pair of Shoepacs. (Two pairs of Insoles, felt, are packed with each pair of Shoepacs, 12-inch M1944.)

#### 42. Shoes, Arctic, Felt and Boots, Arctic, Felt

Shoes, Arctic, Felt (Limited standard item) Stock Nos. 72–S–20 through -24 and Boots, Arctic, Felt (Standard item) Stock Nos. 72–B-126-500 through 126-515, are furnished in four sizes only, and fit approximately as follows:

Size worn in shoes, service (All widths)	Size worn in shoes, Arctic, felt	
5 through 6½	Small	
7 through 8½	Medium	
9 through 10½	Large	
10 through 12½	Extra large	

The approved sock combination to be worn with Shoes, Arctic, felt, is:

One pair of Socks, cushion-sole and

Two pairs of Socks, wool, ski, graduated sizes One pair of Insoles, felt, is worn with each pair of Shoes, Arctic, felt. Two pairs of Insoles, felt, are packed with each pair of Shoes, Arctic, felt.

### 43. Shoes, Boat, Safety-sole

Shoes, Boat, Safety-sole (Standard item) Stock Nos. 72-S-62-60 through -65-30, are available in whole and half sizes 5 through 12, in only one width, and fit approximately as follows:

	Width worn in shoes, service						
Size worn in shoes, service or boots, service, combat	A	В	С	D	E	EE	
		Size worn in shoes, boat, safety-sole					
5, 5½ and 6	6	6	6	6	6	6	
6½	6	6	6	61/2	61/2	61/2	
7	61/2	61/2	61/2	7	7	7	
7½	7	7	7	71/2	71/2	71/2	
8	7½	7½	71/2	8	8	8	
8½	8	8	8	81/2	81/2	81/2	
9	8½	81/2	81/2	9	9	9 .	
9½	9	9	9	91/2	91/2	91/2	
10	9 1/2	91/2	91/2	10	10	10	
10½	10	10	10	101/2	101/2	101/2	
11		101/2	101/2	11	11	11	
11½		11	11	111/2	111/2	111/2	
12	11½	111/2	111/2	12	12	12	

The approved sock to be worn with each pair of Shoes, boat, safety-sole is:

One pair of Socks, wool, cushion-sole

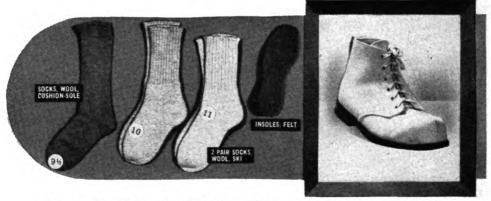


Figure 31. Shoes, Arctic, felt, with approved sock combination.

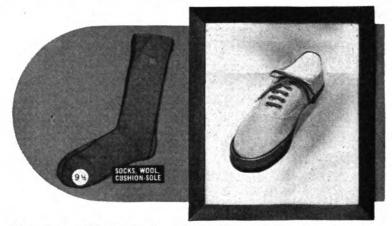


Figure 32. Shoes, boat, safety-sole, with approved socks.

44. Shoes, Felt, Women's

Shoes, Felt, Women's (Standard item) Stock Nos. 72-S-100 through 72-S-102, are furnished in three sizes only, and fit approximately as follows:

Size worn in shoes, field, women's or shoes, service, women's, low	Size worn in shoes, felt, women's	
4, 4½, 5, 5½ all widths	Small	
6, 6½, 7, 7½, 8 all widths	Medium	
8½, 9, 9½, 10 all widths	Large	

The approved sock combination of men's socks to be worn with each pair of Shoes, felt, women's is:

One pair of Socks, wool, cushion-sole

and

One pair Socks, wool, ski

One pair of Insoles, felt, is worn with each pair of Shoes, felt, women's.

42

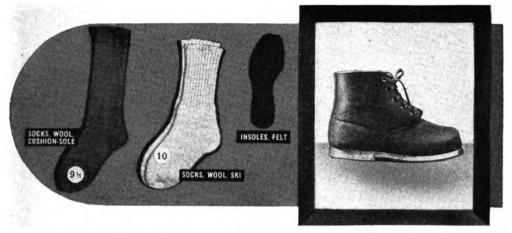


Figure 33. Shoes, felt, women's, with approved sock combination.

45. Shoes, Field, Women's, Composition-sole

Shoes, Field, Women's, Composition-sole (Standard item) Stock Nos. 72–S–110–25 through 72–S–111–925, are available in whole and half sizes 2½A through 12A, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 4 through 10; most sizes are available in eight widths, AAAA through E.

- a. This item fits, size for size, approximately the same as Shoes, service, women's, low, when worn with the approved sock combination. The correct size of Shoes, field, women's, composition-sole, to be worn by each individual is determined in accordance with the procedure outlined in this manual.
- b. The approved sock combination to be worn with each pair of Shoes, field, women's, composition-sole is:

One pair of Stockings, cotton, women's and

One pair of Anklets, wool, women's



Figure 34. Shoes, field, women's composition-sole with approved sock combination.

46. Shoes, Low-quarter, Tan

Shoes, Low-quarter, Tan (Standard item) Stock Nos. 72–S–754–57 through 758–85, are available in whole and half sizes, 4B through 15½EEE, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 5 through 12, in widths A, B, C, D, E and EE. The correct size of Shoes, low-quarter, tan, to be worn by each individual is determined in accordance with the procedure outlined in this manual. The socks recommended for wear with Shoes, low-quarter, tan, are:

One pair of Socks, cotton, tan

or

One pair of Socks, wool, light

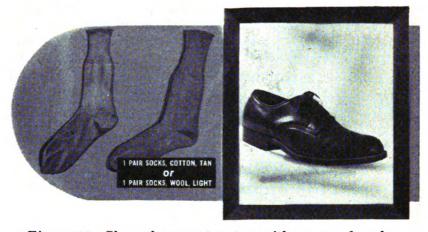


Figure 35. Shoes, low-quarter, tan with approved socks.

47. Shoes, Safety, Composition-sole

Shoes, Safety, Composition-sole (Standard item) Stock Nos. 72-S-1553-18 through -1563-32, are available in whole and half sizes, 5A through 15EEEE, including supplemental tariff sizes.

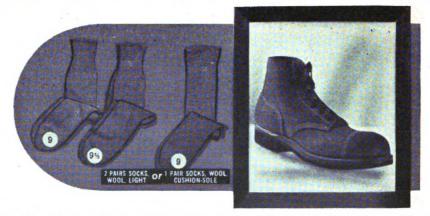


Figure 36. Shoes, safety, composition-sole with approved sock combination.

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Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 5 through 12, in widths A, B, C, D, E and EE.

- a. These shoes are made on an approved type of safety-toe last and are fitted to each individual's foot so far as possible in accordance with the procedure outlined in this manual.
- b. The recommended socks to be worn when fitted with each pair of Shoes, safety, composition-sole are:

One pair Socks, wool, cushion-sole

or

Two pairs Socks, wool, light

48. Shoes, Service, Composition-sole (Type II)

Shoes, Service, Composition-sole (Type II) (Standard item) Stock Nos. 72-S-2223-60 through 2248-65, are available in whole and half sizes, 3EEE through 15½EEEE, including supplemental tariff sizes. Supplemental tariff sizes are listed in War Department publications. Regular tariff sizes range from 5 through 12, in widths A, B, C, D, E, and EE.

- a. The correct size of Shoes, service, composition-sole, to be worn by each individual is determined in accordance with the procedure outlined in this manual.
- b. The approved sock combination to be worn when fitted with each pair of Shoes, service, composition-sole, is:

One pair of Socks, wool, cushion-sole

or

Two pairs of Socks, wool, light



Figure 37. Shoes, service, composition-sole (Type II) with approved sock combination.

49. Shoes, Service, Reversed-uppers, composition-sole (Type III)

Shoes, Service, Reversed-uppers, Composition-sole (Type III) (Standard item) Stock Nos. 72-S-2350-20 through 2356-41, are

available in whole and half sizes, 3EEE through 15½EEEE, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 5 through 12, in widths A, B, C, D, E, and EE.

- a. The correct size of Shoes, service, composition-sole to be worn by each individual is determined in accordance with the procedure outlined in this manual.
- b. The approved sock combination to be worn when fitted with each pair of Shoes, service, composition-sole is:

One pair of Socks, wool, cushion-sole

or

Two pairs of Socks, wool, light



Figure 38. Shoes, service, reversed-uppers, composition-sole (Type III) with approved sock combination.

#### 50. Shoes, Service, Women's, Low

Shoes, Service, Women's Low (Standard item) Stock Nos. 72-S-2375-43 through 2384-21, are available in whole and half sizes, 2½ A through 12A, including supplemental tariff sizes. Supplemental tariff sizes are listed in current War Department publications. Regular tariff sizes range from 4 through 10. Most sizes are available in eight widths AAAA through E.

- a. The correct size of Shoes, service, women's, low, to be worn by each individual is determined in accordance with the procedure outlined in this manual.
- b. The approved stockings to be worn with each pair of Shoes, service, women's, low, is:

One pair of Stockings, cotton, women's





Figure 39. Shoes, service, women's, low, with approved stockings.

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